

## § 61.165

## 40 CFR Ch. I (7-1-97 Edition)

$R_a$ =the actual uncontrolled arsenic emission factor (g/kg) determined in paragraph (d)(3) of this section.

$T_i$ =the theoretical uncontrolled arsenic emission factor (g/kg) determined in paragraph (c)(1) of this section for the same glass type for which  $R_a$  was determined.

(5) Determine the uncontrolled arsenic emission rate for the 12-month period, as follows:

$$U = \frac{\sum_{i=1}^n (T_i \times F \times G_i)}{10^6}$$

Where:

$U$ =the uncontrolled arsenic emission rate for the 12-month period (Mg/year).

$T_i$ =the theoretical uncontrolled arsenic emission factor for each arsenic-containing glass type (i) produced during the 12-month period, as calculated in paragraph (c)(1) of this section (g/kg).

$F$ =the correction factor calculated in paragraph (d)(4) of this section.

$G_i$ =the quantity (kg) of each arsenic-containing glass type (i) produced during the 12-month period.

$n$ =the number of arsenic-containing glass types produced during the 12-month period.

(6) If the value determined in paragraph (d)(5) of this section is less than the applicable limit in § 61.162(a)(1) or (b)(1), the source is in compliance.

(e) To demonstrate compliance with § 61.162(a)(2) or (b)(2), an owner or operator shall:

(1) Conduct emission testing to determine the percent reduction of inorganic arsenic emissions being achieved by the control device, using the following test methods and procedures:

(i) Use Method 108 in appendix B to this part to determine the concentration of arsenic in the gas streams entering and exiting the control device. Conduct three 60-minute test runs, each consisting of simultaneous testing of the inlet and outlet gas streams. The gas streams shall contain all the gas exhausted from the glass melting furnace.

(ii) Use the following methods in appendix A to 40 CFR part 60:

(A) Method 1 for sample and velocity traverses.

(B) Method 2 for velocity and volumetric flowrate.

(C) Method 3 for gas analysis.

(D) For sources equipped with positive pressure fabric filters, use Section 4 of Method 5D to determine a suitable sampling location and procedure.

(2) Calculate the percent emission reduction for each run as follows:

$$D = \frac{(C_b - C_a) \times 100}{C_b}$$

Where:

$D$ = the percent emission reduction.

$C_b$ = the arsenic concentration of the stack gas entering the control device, as measured by Method 108.

$C_a$ = the arsenic concentration of the stack gas exiting the control device, as measured by Method 108.

(3) Determine the average percent reduction of arsenic by calculating the arithmetic mean of the results for the three runs. If it is at least 85 percent, the source is in compliance.

[51 FR 28025, Aug. 4, 1986; 51 FR 35355, Oct. 3, 1986, as amended at 55 FR 22027, May 31, 1990]

### § 61.165 Reporting and recordkeeping requirements.

(a) Each owner or operator of a source subject to the requirements of § 61.162 shall maintain at the source for a period of at least 2 years and make available to the Administrator upon request a file of the following records:

(1) All measurements, including continuous monitoring for measurement of opacity, and temperature of gas entering a control device;

(2) Records of emission test data and all calculations used to produce the required reports of emission estimates to demonstrate compliance with § 61.162;

(3) All continuous monitoring system performance evaluations, including calibration checks and adjustments;

(4) The occurrence and duration of all startups, shutdowns, and malfunctions of the furnace;

(5) All malfunctions of the air pollution control system;

(6) All periods during which any continuous monitoring system or monitoring device is inoperative;

(7) all records of maintenance and repairs for each air pollution control system, continuous monitoring system, or monitoring device;

(b) Each owner or operator who is given approval by the Administrator to

bypass a control device under paragraph (e) of this section shall maintain at the source for a period of at least 2 years and make available to the Administrator upon request a file of the following records:

(1) The dates the control device is bypassed; and

(2) Steps taken to minimize arsenic emissions during the period the control device was bypassed.

(c) Each owner or operator of a source subject to the emission limit in §61.162(a)(1) or (b)(1) shall determine and record at the end of every 6 months the uncontrolled arsenic emission rate for the preceding and forthcoming 12-month periods. The determinations shall:

(1) Be made by following the procedures in §61.164(c)(1), (c)(2), and (c)(3); or in §61.164(d)(5), whichever is applicable; and

(2) Take into account changes in production rates, types of glass produced, and other factors that would affect the uncontrolled arsenic emission rate.

(d) Each owner or operator of a source subject to the provisions of this subpart shall:

(1) Provide the Administrator 30 days prior notice of any emission test required in §61.164 to afford the Administrator the opportunity to have an observer present; and

(2) Submit to the Administrator a written report of the results of the emission test and associated calculations required in §61.164(d) or (e), as applicable, within 60 days after conducting the test.

(3) Submit to the Administrator a written report of the arsenic emission estimates calculated under §61.164(c):

(i) Within 45 days after the effective date of this subpart for a source that has an initial startup date preceding the effective date; or

(ii) Within 45 days after startup for a source that has an initial startup date after the effective date.

(4) Submit to the Administrator a written report of the uncontrolled arsenic emission rates determined in accordance with paragraph (c) of this section, if:

(i) The emission rate for the preceding 12-month period (or preceding 6-month period for the first 6-month de-

termination) exceeded the applicable limit in §61.162(a)(1) or (b)(1).

(ii) The emission rate for the forthcoming 12-month period will exceed the applicable limit in §61.162(a)(1) or (b)(1). In this case, the owner or operator shall also notify the Administrator of the anticipated date of the emission test to demonstrate compliance with the applicable limit in §61.162(a)(2) or (b)(2).

(5) Ensure that the reports required in paragraph (d)(4) of this section are postmarked by the tenth day following the end of the 6-month reporting period.

(e) To obtain approval to bypass a control device, as provided in §61.162(c), an owner or operator of a source subject to this subpart may make written application to the Administrator. Each application for such a waiver shall be submitted to the Administrator no later than 60 days before the bypass period would begin and shall include:

(1) Name and address of the owner or operator;

(2) Location of the source;

(3) A brief description of the nature, size, design, and method of operation of the source;

(4) The reason it is necessary to bypass the control device;

(5) The length of time it will be necessary to by-pass the control device;

(6) Steps that will be taken to minimize arsenic emissions during the period the control device will be bypassed.

(7) The quantity of emissions that would be released while the control device is by-passed if no steps were taken to minimize emissions;

(8) The expected reduction in emissions during the by-pass period due to the steps taken to minimize emissions during this period; and

(9) The type of glass to be produced during the bypass period, and, if applicable, an explanation of why non-arsenic or lower-arsenic-containing glass cannot be melted in the furnace during the bypass period.

(f) Each owner or operator required to install and operate a continuous opacity monitoring system under §61.163 shall:

(1) Submit a written report to the Administrator of the results of the continuous monitoring system evaluation required under § 61.163(b) within 60 days after conducting the evaluation.

(2) Submit a written report to the Administrator every 6 months if excess opacity occurred during the preceding 6-month period. For purposes of this paragraph, an occurrence of excess opacity is any 6-minute period during which the average opacity, as measured by the continuous monitoring system, exceeds the opacity level determined under § 61.163(c)(3) or the opacity level redetermined under § 61.163(d).

(3) Ensure that any semiannual report of excess opacity required by paragraph (f)(2) of this section is postmarked by the thirtieth day following the end of the 6-month period and includes the following information:

(i) The magnitude of excess opacity, any conversion factor(s) used, and the date and time of commencement and completion of each occurrence of excess opacity.

(ii) Specific identification of each occurrence of excess opacity that occurs during startups, shutdowns, and malfunctions of the source.

(iii) The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments.

### Subpart O—National Emission Standard for Inorganic Arsenic Emissions From Primary Copper Smelters

SOURCE: 51 FR 28029, Aug. 4, 1986, unless otherwise noted.

#### § 61.170 Applicability and designation of source.

The provisions of this subpart are applicable to each copper converter at any new or existing primary copper smelter, except as noted in § 61.172(a).

#### § 61.171 Definitions.

All terms used in this subpart shall have the meanings given to them in the Act, in subpart A of part 61, and in this section as follows:

*Blowing* means the injection of air or oxygen-enriched air into a molten converter bath.

*Charging* means the addition of a molten or solid material to a copper converter.

*Control device* means the air pollution control equipment used to collect particulate matter emissions.

*Converter arsenic charging rate* means the hourly rate at which arsenic is charged to the copper converters in the copper converter department based on the arsenic content of the copper matte and of any lead matte that is charged to the copper converters.

*Copper converter* means any vessel in which copper matte is charged and is oxidized to copper.

*Copper converter department* means all copper converters at a primary copper smelter.

*Copper matte* means any molten solution of copper and iron sulfides produced by smelting copper sulfide ore concentrates or calcines.

*Holding of a copper converter* means suspending blowing operations while maintaining in a heated state the molten bath in the copper converter.

*Inorganic arsenic* means the oxides and other noncarbon compounds of the element arsenic included in particulate matter, vapors, and aerosols.

*Lead matte* means any molten solution of copper and other metal sulfides produced by reduction of sinter product from the oxidation of lead sulfide ore concentrates.

*Malfunction* means any sudden failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner so that emissions of inorganic arsenic are increased.

*Opacity* means the degree to which emissions reduce the transmission of light.

*Particulate matter* means any finely divided solid or liquid material, other than uncombined water, as measured by the specified reference method.

*Pouring* means the removal of blister copper from the copper converter bath.

*Primary copper smelter* means any installation or intermediate process engaged in the production of copper from copper-bearing materials through the use of pyrometallurgical techniques.